UTAH DEPARTMENT OF HEALTH

Utah State Medicaid Health Information Technology Plan

Version 2016 – 4.0
Submitted to CMS 09/30/2016

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SMHP Revisions Table

This page is dedicated to providing a summary of the changes made to Utah State Medicaid HIT Plan (SMHP) document.

SMHP Section	Description of Change	Date Requested by State	Date Approved by CMS
1.0 Original	Submission to CMS	12/23/10	
1.1 Revised	CMS requested additional information on appeals process and hospital payments process	1/31/11	
2.0 Original	Submission to CMS	11/22/2013	
3.0 Original	Submission to CMS	11/01/2014	
4.0 Original	Submission to CMS	09/30/2016	

SMHP Introduction

Plan Purpose

This document represents an update of Utah's State Medicaid Health Information Technology Plan (SMHP). The overall purpose of the plan is to improve interoperability across the continuum of care on behalf of Medicaid recipients. As a first step, the Utah Department of Health Division of Medicaid & Health Financing (DMHF) has assumed responsibility for administering an efficient Medicaid Electronic Health Record (EHR) Incentive Payment Program to eligible providers and hospitals, thereby encouraging the adoption of certified EHR technology to promote health care quality and the exchange of health care information. In follow up to the EHR deployment to hospitals and eligible providers, DMHF is moving towards the identification of other Medicaid providers who have historically been ineligible for the Medicaid EHR Incentive Payment Program.

The primary focus of our SMHP is to engage eligible Medicaid providers and facilities in order to improve coordination of care, electronic exchange of information across the continuum of care, and provide an electronic infrastructure for the development of HIT related population health applications in years 2016-2021.

How the SMHP is Organized

Various stakeholders from our community have provided input to this plan. The Utah Department of Health DMHF will continue to work with stakeholders, thereby enabling the pursuit of specific initiatives that encourage the adoption and meaningful use of certified EHR technology and electronic exchange across the continuum for the improvement of health care quality. This SMHP has been aligned with the recommended sections identified in the SMHP companion guide as of June 2015 SMHP Overview Template OMB Approval Number: 0938-1088.

SMHP Overview Template Items	Addressed is Utah's SMHP Section
Section A – As-Is Landscape	As-Is HIT Landscape Starts Page 16
Section B – To Be Landscape	To-Be HIT Landscape Starts Page 27
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SMHP Plan Scope

Detailed Activities for Implementation

Based on the requirements defined in the Federal Regulation 42 CFR Parts 412, et al. Medicare and Medicaid Program Electronic Health Record Incentive Programs and the letter received February 29, 2016 (SMD#16-003) regarding the availability of HITECH Administrative Matching funds, the State Medicaid HIT Plan is to provide CMS with details regarding the necessary activities, processes and timelines for the proposed aims.

EHR Incentive Program

Utah has developed and maintained the necessary systems to collect the attestations for the first year's Adopt, Implement or Upgrade (AIU) payments. Utah began accepting meaningful use attestations in December 2012 for eligible hospitals and January 2013 for eligible professionals. All of the 2013 changes to Stage I Meaningful Use that were outlined in the Stage 2 legislation were implemented on schedule. The state also successfully programmed screens and implemented the required changes for 2014 including the CEHRT Flexibility Rule.

Utah's Incentive Payment program was delayed in implementing the changes outlined in the CMS Stage 3 Rule dated October 2015. The rule change was announced late in the program year and required significant programming changes to implement. The State of Utah was preparing to adopt a new MMIS system which included a new state level system. The decision was made to delay implementation of the Stage 3 changes until the new MMIS system went live July 1, 2016. The State of Utah will be accepting 2015 attestations from July 1-October 31, 2016.

The key activities for Utah's EHR Incentive Payment Program are as follows:

1. Continue to interface with CMS regarding payments made to eligible providers using their developed National Level Repository (NLR) system
2. Process payments on schedule and provide notification of approval/denial for incentive payments
3. Maintain a Web site for Provider Registration and FAQs
4. Develop communication materials about the EHR Incentive Program and/or EHR adoption/meaningful use
5. Conduct provider outreach activities
6. Staff a provider help-line and dedicated e-mail address/phone
7. Monitor and review current CMS policies, propose recommended changes or inclusion of new policies and procedures and develop, update FAQs
8. Validate volume thresholds, payment calculations, meaningful use, quality measures and provider credentials throughout the life cycle of the program
9. Analyze and report on program statistics regarding payments made, meaningful use and clinical quality measures.
10. Provide financial oversight and monitoring of expenditures to combat fraud waste and abuse in the program.

11. Provide financial oversight and monitoring of expenditures for Meaningful Use Public Health Reporting partnerships.

The EHR incentive program requested and received approval for funding to support meaningful use activities with public health partners within the Department of Health back in 2013. Funding in the current IAPD supports the following meaningful use duties through 2018:

Utah Statewide Immunization Information System (USIIS)

- Work with UDOH IT resources to specify and test enhancements to USIIS processing rules, database structure and interface engine in order to process Meaningful Use-compliant HL7 2.5.1 messages.
- Work with Electronic Health Record (EHR) vendors and UDOH IT resources to develop new EHR-USIIS HL7 2.5.1 immunization interfaces for the electronic exchange of immunization information.
- Work with EHR vendors to test and validate new EHR-USIIS HL7 2.5.1 immunization interfaces.
- Manage and track on-boarding eligible hospitals and providers with EHR-USIIS HL7 2.5.1 immunization interfaces.
- Work with eligible hospitals and providers during on-boarding EHR-USIIS interfaces to attain data quality compliant with Meaningful Use and to deploy their interfaces into Production.
- Support eligible hospitals and professionals in their Meaningful Use registration for the Immunization Public Health Measure and to provide notification of pass or fail.
- Work with Electronic Health Record (EHR) vendors and UDOH staff to develop new EHR-USIIS HL7 2.5.1 immunization interfaces for the electronic exchange of immunization information.
- Work with EHR vendors to test and validate new EHR-USIIS HL7 2.5.1 immunization interfaces.
- Manage and track on-boarding eligible hospitals and providers with EHR-USIIS HL7 2.5.1 immunization interfaces.
- Develop specifications for HL7 2.5.1 enhancements to USIIS system rules and database structure to support processing Meaningful Use-compliant HL7 2.5.1 messages.
- Develop specifications for HL7 2.5.1 interface engine enhancements to parse, route and process Meaningful Use-compliant HL7 2.5.1 messages:
- OBX segment: Contraindications, Reactions, Immunities, Vaccine Funding Source, Component Vaccine Type, VIS.
- NK1 segment: Next-of-Kin relationship.
- PD1 segment: Publicity, Protection Indicator and Registry Status.
- ERR segment: Message error status.
- Develop and deploy enhancements to USIIS system rules and database to process Meaningful Use-compliant HL7 2.5.1 messages.

Informatics and Public Health Reporting

- Work with EHR vendors and state Department of Technology Services (DTS) to create interfaces for the exchange of electronic data.
- Test and validate interfaces.
- Aggregate incoming Syndromic Surveillance feeds from eligible hospitals.
- Create Syndromic Surveillance export for BioSense.
- Provide requirements for cCDA parsing and case report process development.
- Act as ELR Coordinator to manage and support meaningful use attestations for eligible hospitals.
- Identify and contact eligible hospitals and providers to initiate meaningful use for ELR reporting.

- Manage and track onboarding process.
- Create and provide attestation memos.
- Work with eligible hospitals and EHR vendors to create and validate a meaningful use compliant ELR HL7 message.
- Process and onboard eligible hospitals onto ELR.
- Create HL7 mappings for hospitals.
- Import EHR local codes.
- Create mappings to local codes.
- Lead requirements to develop MU stage 3 case report process.
- Document rule requirements.
- Develop business requirements documents.
- Test rules and case report process.
- Perform data validate and quality assurance on data feeds from eligible hospitals and providers.
- Manage ELR and case report exception queue.
- Fix message errors in HL7 messages and case reports.
- De-duplicate and merge HL7 messages.
- Provide guidance on case report process.
- Manage vocabulary and code lists.
- Act as Syndromic Surveillance Coordinator to manage and support meaningful use attestations for eligible hospitals and providers.
- Identify and contact eligible hospitals and providers to initiate meaningful use for Syndromic Surveillance reporting.
- Track onboarding process.
- Create and provide attestation memos.
- Work with eligible providers and EHR vendors to create and validate a meaningful use compliant Syndromic Surveillance HL7 message.
- Create data vocabulary mapping from HL7 messages into Utah's disease surveillance system.
- Design, Develop, and implement the capacity to accept electronic case reports for eligible hospitals as required by MU stage 3.
- Update ELR system to accept case report message (cCDA/XML).
- Enhance data model to accept additional data elements contain in case report
- Develop rules engine to process case reports.
- Upgrade ELR system and rules engine to process meaningful use compliant case report messages.
- Add additional vocabulary to ELR system.
- Develop mapping to disease surveillance system.
- Develop ELR rules to accept and process meaningful use compliant case report messages.
- Develop data matching and duplication process to merge case reports with ELR messages.
- Implement and upgrade web service and interfaces for eligible provider and hospital systems for ELR and Syndromic Surveillance.
- Create interfaces in the Mirth Interface Engine.
- Assist with on-boarding new facilities by mapping messages structure and vocabulary.

HITECH Administrative Matching Funds

Over the past 3 years Utah has received two State Innovation Model (SIM) Design Grants from the Center for Medicare and Medicaid Innovation (CMMI.) In 2013, Utah was awarded its first State Innovations Model (SIM) Grant from CMMI to begin the process of putting the previous policy discussions into action. The Innovations effort had a governing body identified as the Utah SIM Executive Policy Group, led by Lt. Governor Greg Bell. This governing body collaborated with 120 community leaders (business, the health care delivery system, health work force education, Utah's mental health systems and government) to continue the work that began

at the 2011 Summit. During that phase, three use cases were prioritized by the policy leaders to include behavioral health integration, obesity and diabetes reduction and advance care planning at the end of life.

In 2015, Utah was awarded a second SIM Model Design grant ($2 million) to develop a State Health Systems Innovation Plan. A draft of that plan was submitted to CMMI July 31, 2016 and is under review as of this writing. The plan is organized around the three prioritized cases identified above and focuses on six infrastructure issues, one of which is Health Information Technology. Recommendations and priority projects from the SIM work are being integrated into this SMHP as deemed appropriate.

The key activities for HITECH Administrative Matching Funds are as follows:

1. Identify list of potential HIT projects
2. Prioritize according to SIM recommendations
3. Identify Fair Share of Medicaid population impacted
4. Identify list of Medicaid providers who were not eligible for MU incentive program
5. Identify source of matching funds
6. Develop cost analysis for individual projects
7. Develop IAPD application for each of the projects
8. Secure matching funds
9. Submit IAPD for each of the projects

We believe that appropriate business processes, staffing, and systems support are in place to ensure continued success with these key activities.

Pursuit of Future Initiatives

As recognized by CMS, continued development of the SMHP is an iterative process and the Utah Department of Health DMHF is committed to updating the plan. Our plan is to continue with the successful administration of incentive payments for all stages of the program, and to support and encourage continued participation in the program in Utah's provider community. Additionally we are seeking to integrate the SIM recommended HIT projects as they are identified and are consistent with the HITECH Administrative Funding opportunities.

The decision to pursue each of these initiatives is contingent upon continued coordination with our community partners and will be referenced in future iterations of Utah's SMHP & IAPD. Some of the ongoing initiatives and identified projects are listed below:

1. Encourage all providers receiving incentives to connect with the State of Utah's designated Health Information Exchange (HIE) in an effort to meet the different stages of meaningful use
2. Require all providers receiving incentives connect with public health databases in an effort to meet meaningful use (i.e. laboratories, immunization registry, etc.)
3. Continued Development and expansion of the Department of Health Master Patient Index (DOHMPI)
4. Initiate an independent evaluation of the EHR incentive program
5. Implement a quality assurance program for Utah's fee for service providers
6. Coordinate efforts of the State's Digital Health Services Commission who has assumed the role of the HIT Governance Consortium
7. Collaborate with other neighboring states HIE's (i.e. ID, WY, NV, AZ, CO, MT etc.). Utah cHIE has operational connections with HIEs in Colorado.
8. Develop and support IADP applications as determined to be appropriate through the application of HITECH.
9. Work with neighboring states including Idaho, Nevada, and Arizona on cross-state line interoperability criteria
10. Participate in the 90/10 Community of Practice

SMHP Plan Background

State HIE/HIT Governance Structure

The Utah Department of Health DMHF has worked closely and collaboratively with all of the HIT stakeholders throughout our State. This is made possible by having the Utah Department of Health Deputy Director, Dr. Bob Rolfs and Wu Xu, Director for the Center for Health Data and Informatics serve as the State Health IT Coordinators consecutively. Dr. Rolfs is a current board member on Utah's Health Information Network's Clinical Health Information Exchange. Dr. Xu is the lead staff for the Governor-appointed Utah Digital Health Service Commission.

The HIT community in Utah has embraced a vision that "Utah can be a place where standard, safe and smart sharing of accurate electronic health information results in better health care, lower cost and healthier communities." The commission prioritizes proposals, activities and funding opportunities that are HIT related, and holds the participants accountable to the State's goals related to health reform and improved health for all. All SIM HIT related activities are overseen by the Digital HIT governance.

Current State HIE & HIT Initiatives

While many HIT initiatives in Utah are relatively mature, we realize a great deal of work remains to advance the statewide use of HIT and clinical health information exchange. The Utah Health IT Strategic Plan (2016-2020) details our strategic goals, objectives, current and planned efforts to promote a sustainable statewide HIE architecture for improved quality, efficiency, and reduced health care costs. This plan is being followed by all of the Digital Health Services Commission partners and stakeholders in order to provide consumers and their health care providers with credible, secure, and accurate health information at the lowest possible cost. A list of HIT initiatives coordinated across the Utah community and mapped to the ONC can be found in Appendix (HIT Strategic Goals and Projects Defined)

Utah's approach to HIT has been based on statewide cooperation and regional sharing, strong executive leadership, and legislative reforms. This history, along with a relatively high penetration of EHR and Hospital Information Management Systems (HIMS), has enabled a market-driven HIE. Based on information from the Health IT Dashboard, an estimated 83% of all outpatient primary care practices in Utah have adopted certified EHR systems. This is slightly above the national average of 79%.

Current HIE/HIT Activities and Funding Sources

The State of Utah has received more than $45 million dollars in state and federal funding to support our current HIE and HIT initiatives. When the initial SMHP was written in 2010, the following tables were representative of the funding received. This table has been made current as of 2016.

Utah Grant Funding Sources Table

Grant #1: Beacon Community Grant awarded to HealthInsight – Utah's Regional Extension Center Funding Amount = $15,790,181	In 2010, Utah received a Beacon Community Grant from the ONC for HIT. The focus of this grant will be to improve adult diabetes care management in Salt Lake, Summit and Tooele Counties, by increasing availability, accuracy and transparency of quality reporting, connecting providers to the State's HIE and fostering better collaboration with community partners.
Grant #2: ARRA Regional Extension Center Technical Assistance awarded to HealthInsight – Utah & Nevada's Regional Extension Center Funding Amount = $6,917,783	In 2010, as the Regional Extension Center for Nevada and Utah, HealthInsight provides federally-subsidized technical assistance on a priority basis with physician office practices to offer hands-on, one-on-one customized assistance selecting and effectively using electronic health records to improve care.
Grant #3: State Health Information Exchange Cooperative Agreement Program awarded to the Utah Department of Health Funding Amount = $6,296,705	In 2010, the Utah Department of Health received this funding to build upon existing efforts to advance regional and state-level health information exchange while moving toward nationwide interoperability. The majority of this funding was sub-contracted to UHIN, the state's designated clinical health information exchange vendor.
Grant #4 CHIPRA Quality Demonstration Grant awarded to the Utah Department of Health Funding Amount = $10,277,360	In 2010, The Utah Department of Health received this funding to use HIT to coordinate care for children in Utah & Idaho through Medical Homes and share immunization data between both States' HIE's.
Grant #5 HRSA Public Health Clinical Information Exchange with Providers Funding Amount = $1,200,000	In 2009, UHIN, the University of Utah and the Utah Department of Health collectively applied for and received funding to develop Utah's Newborn Screening Clinical Health Information Exchange which will allow users to share test results of newborn hearing and blood screenings with a child's primary care medical home.
Grant #6 NIH – Statewide Master Patient Index (MPI) for Health Funding Amount = $2,000,000	In 2009, a research grant was issued to the University of Utah, Intermountain Health Care, Utah Department of Health and UHIN to develop and pilot a better framework for a statewide MPI to enhance the capacity of the cHIE and better support healthcare treatments, payments and public health uses.
Grant #7 Department of Agriculture Broadband Availability Survey Funding Amount = $300,000	In 2009, the Utah Department of Technology Services received funding to conduct a survey in places where broadband is unavailable and create opportunities for collaboration at a community level to use HIT and information exchange to achieve health care gains.
Grant #8 CMS Medicaid Meaningful Use Planning Grant Funding Amount = $400,000	In 2010, Utah Medicaid received a planning grant to develop the SMHP and IAPD to administer EHR incentive payments for the meaningful use of EHR's and clinical information exchange.
Grant #9 ONC – Health IT Workforce Development Funding Amount = $3,364,798	In 2010, Salt Lake Community College, with eight other states, received funding to develop and promote health information non-degree training opportunities for health IT professionals.
Grant #10 CMS/CMMI – State Innovation Model planning grant Funding Amount = $$942,4582	This Round 1 model design grant afforded Utah to gather policy leaders around the core infrastructure issues and examine the evidence. This effort resulted in the prioritization of three use cases (behavioral health integration, obesity and diabetes reduction, and advance care planning at end of life).
Grant #11 CMS/CMMI – State Innovation Model design grant Funding Amount = $2,000,000	A second round of funding for model design work has resulted in a set of specific recommendations addressing 6 infrastructure issues associated with the three prioritized use cases.
Grant #13 ONC – Community Health Information Exchange Funding Amount = $100,000	UDOH, UHIN and Intermountain developed the electronic exchange for the newborn hearing screening results and follow-up diagnostic reports between providers, HIE and public health program.

Other Current Complementary Activities

The robust HIT infrastructure Utah has built will optimize our ability to access accurate information on health care quality indicators. This information supports transparency of quality and cost, which can be used for health payment reforms.

DMHF has funded the Center for Health Data and Informatics' Health Informatics Program (HIP) through an IAPD to develop the Department of Health Master Patient Index (DOHMPI). HIP has successfully completed the first use case to link the death records with the Medicaid eligibility records and send the death notification to Medicaid.

HIP is planning the DOHMPI next use cases such as death notification for Medicaid providers or identity validation for Medicaid newborns.

From 2010-2013 the State of Utah advanced statewide use of HIT and clinical health information exchange to improve health care quality and reform by using ARRA funds awarded through the Statewide Health Information Exchange Program (UHIN), HIT Regional Extension Center, and Beacon Community Program (HealthInsight.)

UHIN has issued over 4,000 health care providers a clinical health information exchange (cHIE) user name and password to exchange clinical health information for treatment purposes at the point of care. They have expanded cHIE services to include electronic prescribing, laboratory orders and results delivery, and medical history to support meaningful use. They have developed a sustainable governance and business model to operate the cHIE and have plans to integrate public health data exchange with clinicians thereby reducing the burden on providers, increasing timely and complete reporting for population health.

HealthInsight is a Medicare Quality Improvement Organization (QIO), the HIT Regional Extension Center (REC) for Utah and serves as the Agency for Healthcare Research and Quality (AHRQ) Chartered Value Exchange for the state as well. They are a key partner and provide technical assistance to providers in adopting electronic health record systems and reaching meaningful use requirements which improves patient care and decreases unnecessary cost in the health care system. They have extensive experience with the Security Risk Analysis meaningful use requirement, and provide multiple levels of support with this difficult measure.

Utah Medicaid has participated in the Utah All Payer Claims Database (APCD) managed by the Office of Health Care Statistics. The APCD became operational in 2013 and receives a monthly data feed amounting to approximately 50-65 million claims annually. The data is from the private sector as well as Medicaid and provides a detailed resource for medical researchers, public programs, and other authorized users. Utah's APCD is able to analyze episodes of care from statewide health insurance claims, allowing a view of the complete course of patient care from initial diagnosis through treatment and follow-up. In the future the Office of Healthcare Statistics hopes to be able to also capture and analyze data for patients who are completely uninsured.

All the contributing and necessary parties are aligned and have a common vision for how HIE and HIT are implemented throughout the state of Utah. Utah's Medicaid EHR Incentive Payment Program will continue to be built upon this solid foundation and the program manager and staff will help pursue initiatives that encourage the adoption of certified EHR technology and audit for its meaningful use.

SMHP Plan Development

MITA Approach

Utah assumed a Medicaid Information Technology Architecture (MITA) approach to determine the current "As-Is" and the future "To-Be" HIT landscape and has created a roadmap for the administration/oversight of the HIT incentive program. The SMHP Overview Template was followed in great detail and was critical in assisting the planning team.

Critical Milestone	By
Initiated Internal Review of SMHP & IAPD	December 2, 2010
Submitted I-APD & SMHP to CMS – Version 1.0	December 31, 2010
Hired/Designated Program & DTS Staff	January 31, 2011
Created System Technical Requirements for Making Payments	February 28, 2011
Received I-APD & SMHP approval from CMS	February 28, 2011
Designed & Developed System for Making Payments	March 31, 2011
Completed Integration Testing	May 30, 2011
Completed Issue(s) Resolution	June 30, 2011
Conducted Provider Outreach, Trained & Implemented Regarding the Application Process	June 30, 2011
Hired/Designated Remaining Program Staff	July 31, 2011
Accepted Applications for EHR Incentive Payments from Providers	September 1, 2011
Made First Set of EHR Incentive Payments to Providers for AIU	November 18, 2011
Made First Set of EHR Incentive Payments to Hospitals	December 16, 2011
Developed System Definitions & Requirements for Meaningful Use Stage 1	January 1, 2012
Submitted Revised IAPD – Version 2	July 1, 2012
Created System Technical Requirements for Meaningful Use Stage 1	May 15, 2012
Designed & Developed System for Making Payments for Meaningful Use Stage 1	December 7, 2012
Completed Integration Testing	November 15, 2012
Completed Issue(s) Resolution	November 28, 2012
Submitted & Received a SMHP Amendment for Meaningful Use Stage 2 Rule Changes for 2013 (in attachments section)	January 23, 2013
Made first MU incentive payments to hospitals	February 1, 2013
Made first MU incentive payments to providers	March 8, 2013
Submitted audit strategy and approved (in attachments section)	May 30, 2013
Submit Revised I-APD – Version 2.0	September 16, 2014
Submit Revised SMHP Version 3.0	November 1, 2014
Create System Technical Requirements for Meaningful Use Stage 2 for 2014 Implementation	August 7, 2014
Submit updated audit strategy Version 3.2	9/30/2014
Design & Develop System for Making Payments for Meaningful Use Stage 2	April 1, 2015
Make Stage 2 MU incentive payments to providers	April 1, 2015
Make Stage 2 MU incentive payments to hospitals	April 1, 2015
Submit revised IAPD Version 3.0	November 6, 2015
Replace current Oracle Solution with CNSI's HIT Incentive Product eMIPP	July 1, 2016
Launch approved screens for Modified Stage 2 requirements - EH	July 1, 2016

Launch approved screens for Modified Stage 2 requirements - EP	July 1, 2016
Plan and develop IAPD projects according to Medicaid criteria, SIM priorities and matching funds opportunity	September - December 2016
Begin review and update of Audit Strategy	January 2017
Submit series of IAPD amendments staged according to priorities	January 2017-2021
Operationalize IAPD initiatives	January 2017-2021
Submit serious of IAPD amendments staged according to priorities	January 2017-2021
Operationalize IAPD initiatives	January 2017-2021

SMHP Workgroup

In the planning process, the Utah Department of Health DMHF sought out and incorporated input for the following stakeholder organizations:

1. Association of Utah Community Health Centers (AUCH) is the primary care association for Utah whose members include Bureau of Primary Health Care (BPHC) grantees and other providers who strive to meet the needs of the medically underserved.

2. HealthInsight is a Medicare Quality Improvement Organization (QIO) and HIT Regional Extension Center (REC) for Utah and serves as the Agency for Healthcare Research and Quality (AHRQ) Chartered Value Exchange for the State as well. They host our State's HIT Task Force meetings, where grant and project managers from the State HIE program, statewide clinical health information exchange (cHIE), Beacon Community, Medicaid HIT Incentives and CHIPRA Quality Improvement Project meet monthly to coordinate overlapping issues and project interdependency.

3. *Utah Health Information Network* (UHIN) is our statewide Health Information Exchange infrastructure (HIE). A list of participating healthcare entities in UHIN's Clinical Health Information Exchange (cHIE) can be found in the Attachments section of this SMHP along with a recent cHIE update that lists UHIN's accomplishments, plans, risks and financial status.

4. Utah Hospital Association (UHA) represents member hospitals and all ten healthcare systems operating in the State of Utah.

5. *Utah Department of Health Office of Public Health Informatics,* whose mission is to coordinate and support Utah's e-health initiatives and to facilitate development of systematic applications of information, statistics, and computer technology for Utah's public health surveillance, health service and learning.

6. *Utah Department of Technology Services,* which is Utah's consolidated IT resources organization that provides technical support to our MMIS and other business operations.

Governance Review

The SMHP was reviewed by key Utah Department of Health and DMHF management prior to submission to CMS.

Utah's "As-Is" HIT Landscape

Governance Landscape

The Utah Department of Health is the single State agency for the Medicaid and CHIP programs. The Division of Medicaid and Health Financing serves as the Medicaid and CHIP administrative agency within the Department of Health. All of Utah's state-level public health agencies also co-reside within Utah Department of Health.

The Utah Digital Health Service Commission is the oversight governance body for the statewide health IT and clinical Health Information Exchange (cHIE). Dr. Wu Xu, Director for the Center for Health Data and Informatics and the lead staff for the Digital Health Service Commission, has been designated the State Health HIT Coordinator.

The State Health IT Coordinator and the Director for the State Innovation Model Design Grant were given an opportunity to contribute to the SMHP. The Commission and SIM grant has worked with the following partners and organizations.

Representing	*Organization Names*
Government:	Utah Department of Health, including Utah Medicaid Program, Utah Department of Technology Services, Utah Department of Insurance, State Office of Education, Veterans Administration Salt Lake Medical Center, Utah Association of Local Health Officers,
Private:	Utah Health Information Network
Clinical/Hospital:	Intermountain Healthcare, University of Utah Health Sciences Center, HCA/MountainStar Hospitals, Central Utah Clinic, Utah Hospitals and Health Systems Association, Utah Medical Associations, ARUP Laboratories
Insurers:	Deseret Mutual Benefits Administrators, Public Employee Health Plans, Regence Blue Cross Blue Shield, SelectHealth, Molina Health Plans
Communities:	Utah Chartered Value Exchange at HealthInsight, Association for Utah Community Health, Utah Association for Home Health Care/Utah Hospice and Palliative Care Organizations, Utah Pharmacists Association, Utah Health Care Association, Utah Telehealth Network and Utah Indian Health Advisory Board
Education & Research:	University of Utah

Utah Medicaid has participated in UHIN's governance since its founding in 1993. UHIN as previously mentioned is the State's designated HIE Vendor. They have a statewide geographic scope to support Utah Medicaid in the HIT incentive project. UHIN is governed by a board of directors and Dr. Bob Rolfs is a member of this board.

UHIN is central to the State's HIT & HIE initiatives and activities, including the exchange of billing and clinical information. The Utah MMIS receives claim data from providers via UHIN and provides Medicaid recipient data through UHIN for exchange with participating providers. At this time, UHIN is in production for laboratory results delivery and initiating a pilot for the query function. The Department of Health Center for Health Data and Informatics routinely convenes with UHIN and receives monthly updates.

In 2012, as the result of HB 141, all of Utah's Medicaid and CHIP lives were opted in to the state's HIE. As of 12/31/2015 there were 446,641 CHIP and Medicaid lives enrolled in the cHIE. An additional 2,651 members have requested to be opted out of the cHIE.

The Utah Department of Health gateway has implemented functionality for sending medication history files through the cHIE as SFTP files. They are in operation and currently testing and validating newborn hearing screening messages to be sent through the cHIE via HL7 messaging.

The USIIS Program supports the Health Information Technology Plan by working with eligible providers (EPs) and eligible hospitals (EHs) in their efforts toward submitting immunization data to USIIS, the Utah Statewide Immunization Information System. USIIS supported Meaningful Use from its inception, providing documentation/instructions, online registration, secure methods for submitting data and status notices used by EPs, EHs and the Medicaid Program for attestation purposes. The USIIS Program also worked with Electronic Health Record system vendors used by Utah EPs and EHs to develop, test and approve for release HL7 interfaces that comply with MU stages and goals. Advances attained during this time include implementing 40 new interfaces for EHR systems used by Utah EPs and EHs and implementing three additional secure transport methods—including submission via the Utah clinical health information exchange (cHIE). The USIIS Program has assisted over 1,200 EPs and EHs through all stages of Meaningful Use, and has on-boarded 236 EPs and 32 EHs for Stage 2/Modified Stage 2. Furthermore, the USIIS Program has developed data quality reports and a process to periodically provide data quality assessments and guidance to EPs and EHs as they continue to submit immunization data to USIIS.

Our public health partners, including Electronic Laboratory Reporting, Syndromic Surveillance, and Immunization Reporting, have developed a joint website dedicated to Public Health Reporting for Meaningful Use. This is a starting point for eligible professionals and eligible hospitals to obtain information, technical specifications, deadlines, and to register to conduct testing or exchange with these agencies. One form will be used for all areas. This process is in collaboration with EHR Incentive Program within the Division of Medicaid and Health Finance. Utah's cancer registry is also developing capacity to accept meaningful use submissions.

In order to support ongoing efforts towards public health reporting and Meaningful Use, the EHR Incentive program has entered into Memoranda of Understanding with these three public health partners, which will allow HIT funding to pay for our public health partners' staff time that is dedicated specifically to Meaningful Use. This is detailed in Utah's most recent IAPD. The registration process is for Utah Eligible Professionals and Eligible Hospitals intending to apply for the Medicaid and/or Medicare EHR Meaningful Use incentive programs for all meaningful use stages. The registration process is

managed online and can be accessed with the following link http://health.utah.gov/meaningfuluse/

A sample letter is attached for a provider whose Modified Stage 2 test results include submission of Meaningful Use test data to the UDOH syndromic surveillance information system.

Staff from both the Department of Health's Office of Public Health Informatics and the DMHF are members of HealthInsight's REC Advisory Board as well. HealthInsight continues to offer expertise on HIT and meaningful use. They have provided on-site assistance to clinics and they have consulted on vendor selection and implementation. They are also providing assistance to current EHR users in workflow redesign, audit documentation and meaningful use. They offer several levels of support with the Security Risk Assessment meaningful use measure. They have assisted many of their clients in obtaining their first and second year payments. HealthInsight has been helpful in updating EHR program staff regarding the perspective of clinics/hospitals they work with as Utah Medicaid's EHR Incentive Payment Program evolves. They have also generated helpful resources for providers regarding meaningful use attestation audits and continue to provide educational opportunities for Utah providers.

Provider Landscape

The following Utah providers and hospitals have received incentive payments for either adopting, implementing or upgrading to certified EHR technology or for achieving meaningful use:

Medicare EPs	3024 (as of 6/30/16)
Medicare EH (dual-eligible)	47 (as of 6/30/16)
Medicaid EP AIU	932
Medicaid EP MU	700
Medicaid EH AIU (dual-eligible)	41
Medicaid EH AIU (Medicaid only)	2
Medicaid EH MU	37

Utah has paid year one incentives to over 900 unique EPs. Of these providers, 494 unique EPs have received at least one meaningful use payment. Only 20 Utah providers reached Meaningful Use Stage 2 in 2014. For eligible hospitals, 43 year one payments have been made and 37 of that group have demonstrated meaningful use. Nine of these hospitals have completed all four years of the incentive program.

There are 12 Federally Qualified Health Centers (FQHC) in Utah, encompassing 29 different clinic locations. All of these FQHCs have adopted certified EHRs and all have attested for incentive payments. The two largest groups achieved Stage 2 Meaningful Use in 2014 and will be attesting for the 5th incentive payment. The remainder have satisfied the Stage 1 Meaningful Use requirements for one or two years. It is expected that the bulk of these providers will continue participation throughout the life of the program.

Utah's Veterans Affairs Medical Center (VAMC) in Salt Lake City is a formal organizational member of the UHIN and the cHIE project. The VAMC successfully completed a project in partnership with UHIN that allows patient summaries to be exchanged bi-directionally. The process is working well but does require two separate consents from the patient in

order for data to be exchanged. They have also been working on projects for direct connection of home health information as well as the sharing of care plans.

The following will serve as an update regarding the tribal participation in the EHR incentive program:

Utah Navajo Health Systems, Inc. is using NextGen as their EHR at all clinic sites and the system is integrated with all sites. This group is also a FQHC. Twelve eligible providers received their AIU incentive payment and 7 providers achieved 90 days of meaningful use. At this time the clinic appears to be discontinuing participation.

Paiute Indian Tribe of Utah received 5 AIU payments, and 3 of those providers achieved 90 days of meaningful use. The clinic uses the RPMS EHR.

The Goshute Tribe of Utah opened a tribally-owned clinic in Salt Lake City, Utah in 2013. So far they have had one medical provider and one dental provider successfully attest for the EHR Incentive Program.

Utah has one tribal hospital, Blue Mountain Hospital, which has received three years of incentive payments.

The Ute Mountain Ute Tribe, and Ute Tribe at Uinta and Ouray originally indicated that they would pursue the incentive program, but no attestations have been received from these clinics as of September 2016.

Legislative Landscape

Utah health policymakers acknowledge that health information technology (HIT) and health information exchange (HIE) are two driving forces to transform health systems. To ensure that health care reform leads to better health care, the Utah legislature passed the following legislation to improve efficiency and quality of health care and reduce cost since 2005. It was important to include bills since 2005 because of the continual impact they have. To reinforce the importance of legislative bills as it pertains to HIT and HIE, the following table is being provided:

Bill No. & Sponsor	Bill Title	Year Passed
S.B. 132 Christensen, A.	Health Care Consumer's Report	2005
H.B. 137 Daw, B.	Pain Medication Management and Education	2007
H.B. 6 Menlove, R.	Controlled Substance Database Amendments	2007
H.B. 9 Morley, M.	Health Care Cost and Quality Data	2007
H.B. 133 Clark, D.	Health System Reform	2008
H.B. 326 Curtis, G.	CHIP Open-Enrollment	2008
H.B. 119 Daw, B.	Controlled Substance Database Amendments	2008
H.B. 24 Menlove, R.	Amendments to Utah Digital Health Service Commission Act	2008
H.B. 47 Menlove, R.	Standards for Electronic Exchange of Clinical Health Information	2008
H.B. 188 Clark, D.	Health System Reform – Insurance Market	2009
H.B. 106 Daw, B.	Controlled Substance Database Amendments	2009
H.B. 331 Dunnigan, J.	Health Reform--Health Insurance Coverage in State Contracts	2009
H.B. 128 Menlove, R.	Electronic Prescribing Act	2009
H.B. 165 Newbold, M.	Health Reform--Administrative Simplification	2009
H.B. 294 Clark, D.	Health System Reform Amendments	2010
H.B. 186 Menlove, R.	Controlled Substance Database Revisions	2010
H.B. 52 Newbold, M.	Health Reform - Uniform Electronic Standards - Insurance Information	2010
H.B. 18 Daw, B.	Health Reform – Cost Containment	2011
H.B. 19 Dunnigan, J.	Insurance Law Related Amendments	2011
H.B. 128 Dunnigan, J.	Health Reform Amendments	2011
H.B. 0404 Ipson, D.	State Health Insurance Amendments	2011
H.B. 0046 Menlove, R.	Electronic Personal Medical Records	2012

Bill No. & Sponsor	Bill Title	Year Passed
H.B. 0450 Dee, B.	Health Insurance Amendments	2012
H.B. 0475 Ray, P.	Medicaid Amendments	2012
S.B. 0085 Christensen, A.	Medicaid Cost Control Amendments	2012
H.B. 25 Barlow, S	Patient Identity Validation	2012
H.B. 42 Valentine, J.	Repeal of Health Insurance Mandate Review	2013
H.B. 364 McCay, D.	Nullification of Federal Health Care Law	2013
H.C.R. 10 Adams, J.	Concurrent Resolution on the Patient Protection and Affordable Care Act and State Health Care Reform	2013
S.B. 213 Knudson, P.	Employer Association Health Plan Amendments	2013
S.B. 242 Hillyard, L.	Health Insurance Market Amendments	2013
S.B. 142 Weiler, T.	Small Employer Health Insurance Amendment	2014
H.B. 141 Dunnigan, J.	Health Reform Amendments	2014
S.B. 71 Harper, W.	Informed Consent Amendments	2014
S.B. 251 Shiozawa, B.	Amendments to Medicaid and Health Care	2014
S.B. 272 Davis, G.	Expansion of Medicaid Program	2014
H.B. 114 Ward	Controlled Substance Reporting	2016
H.B. 239 McKell	Access to Opioid Prescription Information via Practitioner Data Management Systems	2016
H.B. 149 Daw	Death Reporting and Investigation Information Regarding Controlled Substances	2016

The Utah legislature has shown its support of HIT initiatives in Utah. We feel that our Medicaid program and our HIT/HIE partners have received all the needed legislation to continue and move forward with our EHR Incentive Payment Program into the future. Additional supportive legislation is likely to be considered in the next session.

Utah Medicaid Operations & Systems Support Landscape

Utah Medicaid is committed to educating providers, promoting the EHR incentive program and working with UHIN and HealthInsight to meet the goal of an increase in numbers of medical professionals using certified EHR technology.

Utah Medicaid Bureau of Medicaid Operations has a provider training program. This program has been used to help educate providers on the Medicaid EHR Incentive Program. Additionally, Medicaid has a web site that Medicaid providers can use to find the right entity for questions about EHR, cHIE and the Medicaid EHR Incentive Program. The website has and will continue to be updated with relevant timelines, documents and materials, including final versions of the SMHP.

Utah Medicaid staff have been guest speakers at UHIN's quarterly provider fairs, to explain how to qualify for the Medicaid Incentive Program including moving forward on MU and to refer providers to HealthInsight for technical assistance related to HIT.

The Utah Medicaid EHR Incentive Program is staffed by a Health Program Manager, with a Health Program Specialist who processes the provider and hospital attestations. Oversight is provided to this group from the Assistant Bureau Director for the Bureau of Managed Health Care. Program staff is readily available to answer the Provider Hotline, and interact with providers on a daily basis answering questions or addressing technical issues with the attestation site. This Hotline number also appears on every screen that providers/hospitals encounter when they are completing an attestation.

In 2013, the State of Utah selected a new MMIS replacement vendor. The vendor is CNSI and the Utah MMIS replacement system is called PRISM (Provider Reimbursement Information System for Medicaid). CNSI has customized a software solution package outside of PRISM titled the Electronic Medicaid Incentive Payment Product (eMIPP.) The decision to use CNSI's eMIPP product was based on the fact that it is a pre-built, "off-the-shelf" solution that would integrate simply with the PRISM infrastructure. We feel confident that this will improve the user experience for incentive program participants, and we believe that our payment administration process will also be streamlined with this new solution.

Currently the states of Michigan, Washington, Illinois and Maryland use eMIPP to administer their Medicaid EHR Incentive Program. Sharing this solution with other states offers an additional benefit. The cost of programming any changes resulting from future CMS final rules can be split among these states. The State of Utah completed requirements gathering and system design for a Utah implementation of eMIPP. The State and CNSI determined it would be best to implement the eMIPP product at the same time as the Provider Enrollment module. Despite some development delays, eMIPP went live in July 2016. The previous Oracle solution has been retired, however, the requirements documentation used to build it will be retained and used as a resource as needed.

Although eMIPP was implemented in July 2016, Utah will continue to make payments to EPs and EHs from our legacy system until the claims modules of PRISM are implemented. At this time we anticipate that claims and payments will be live in PRISM in December 2019.

Program staff work closely with state DTS and participates in the testing process. The DTS resources needed for maintenance, development, testing and implementation of the eMIPP payments are in place and funding is outlined in the most recent IAPD.

The following technical work is supported by CNSI and is considered integral for an administration of the EHR Incentive Payment Program.

CNSI scope of work for the eMIPP product includes

- Maintaining a two-way Interface between eMIPP and the NLR so that new provider records and updates can be received from the NLR, and payment requests, payment records, audits and appeals can be communicated to the CMS NLR.
- Developing and testing user interface screens eMIPP providers and state personnel.
- Maintaining and updating all meaningful use requirements to conform with CMS regulatory changes and program updates.

Cost estimates for state technology solutions supporting the payment process may be found in the State's current HIT IAPD. Any work that CNSI performs is being paid for by the MMIS replacement IAPD that Utah has in place.

The state successfully implemented the updates to Meaningful Use as outlined by CMS for 2013. CMS reviewed and approved all screen changes and methodologies. The 2014 Meaningful Use changes including Stage Two MU and CEHRT flexibility rule were also reviewed and approved by CMS prior to implementation.

At the time of eMIPP go-live 7/1/2016, the Modified Stage 2 Meaningful Use modifications are completed and approved by CMS. Providers are now attesting through the new eMIPP system. The provider will access the CMS National Level Registry (NLR) and register for the program. They receive an invitation to attest in eMIPP when this record is received by the state. (Returning providers receive notifications to enter eMIPP for attestation based on yearly deadlines applicable to the provider's stage of participation.) The provider proceeds to the PRISM provider portal and log into eMIPP where the provider will be able to apply and submit eligibility information, attestations and complete other required forms. Proof of purchase, adoption or upgrade along with the provider's MU report cards will be requested upon attestation and will be retained by the program manager as part of the initial file created and housed in Utah Medicaid's eMIPP module.

The state user in the EHR reviewer role has access to these attestations and will review all supporting documentation and perform prepayment verifications. eMIPP does an automated check of the ONC national registry of certified EHR technology to confirm the certification number reported in attestation. The eMIPP system has established business rules based on the meaningful use measure specifications to do automated analysis on numerators and denominators submitted with the attestation. The system does frequent sanction checks against local and national databases to identify any providers who should not be allowed to participate or who may require additional review.

If additional information is needed to support patient volume or meaningful use, the reviewer will request this information. The reviewer also has the functionality to reject the provider attestation so that the provider can make corrections. Once the file is determined to be complete and eligible the EHR reviewer recommends the provider for payment. The approval of the payments is handled in the EHR approval role which is currently assigned to an assistant bureau director in the DMHF.

Upon approval in eMIPP, the D16 duplicate payment check interface will check CMS for permission to pay. This interface runs daily. If the record passes the duplicate payment check then an interface sends all information necessary for the payment request to the legacy MMIS system. This interface will also run on a daily basis, however checks are

only issued in the legacy MMIS once per week on Friday. The program is mindful that payments must be made within 45 days of notification to CMS. The program uses the existing Special Payments functionality in the legacy system to accomplish these payments. On Tuesday of the following week MMIS will send the status of the payment and the warrant number back to the eMIPP system. Upon receipt of this information eMIPP will process the D18 to notify CMS that payment was issued.

Incentive payments for eligible providers who have a minimum of 29.5% (rounded to 30%) patient encounters paid by Medicaid, will then be eligible to receive an incentive payment of $21,250 in his/her first year payment and $8,500 in subsequent years.

For pediatricians who apply and are considered eligible they would receive up to the maximum allowable amounts of $14,167 in the first payment year and $5,667 in subsequent years. If the pediatrician is not hospital based and can demonstrate that they meet the minimum 30% threshold, they will qualify to receive the full incentive of $21,250 in his/her first year payment and $8,500 in subsequent years.

Hospitals incentive payments are calculated by program staff using the prescribed formula provided by CMS. Hospitals meeting Medicare meaningful use may be deemed eligible for Medicaid incentive payments. Eligible hospitals will receive a total gross payment over the course of four years. Their payment will consist of the $2,000,000 base plus a per discharge amount based on the Medicaid share of patients seen. Hospitals will receive fifty percent of the payment in the first year and forty percent in the second year, and five percent the last two years. In addition to requesting discharge data from the 12-month period that ends in the Federal fiscal year before the hospital's fiscal year, hospitals will have to include in their registration their full, legal business name, national provider identifier (NPI), business address/phone, tax payer identification number (TIN) and CMS certification number and certified technology. All Utah hospitals have been informed of the 2016 deadline to make their initial application for payment.

If a provider or hospital is denied payment due to being determined ineligible, they receive written notice of the decision. Provider or hospital will have an option of an appeals process if they disagree with denied payment (see attached audit strategy). These hearings are administrative hearings and governed by the Utah Administrative Code, R410-14-5.

The Administrative Hearing process (see attached Audit Strategy) begins when a petitioner or provider receives a denial notice for a service or payment and then requests a hearing. The appeals request form is available to all providers on the Medicaid website, and can be submitted by mail. The appeal can also be initiated from within the eMIPP product. If someone phones and requests a hearing, a hearing request form will be mailed with a return envelope, faxed, or emailed. The hearing request and the subsequent scheduling of the hearing(s) will be tracked by the EHR Incentive Payment Program Manager and the Administrative Hearing Unit's secretary until a recommended decision is made.

A final decision letter is prepared by a judge who has reviewed the action, the issues, the findings of fact, the conclusions of law and has documented the disposition, and the reasons for the disposition in a Final Agency Order that is signed by the State Medicaid Director (or his/her designee.) The Director may affirm, reverse, modify or remand the Recommended Decision for further findings. This Final Agency Order includes details about subsequent appeal processes to be used if the petitioner disagrees with the Final Agency Order.

After the Final Agency Order is signed by the Director, the original is sent to the petitioner or his representative by certified mail with a return receipt and copies are sent to other interested parties.

Providers may reapply for incentive payments if and when they meet the eligibility criteria previously used to deny payment. The State would verify any changes made from the initial application and process accordingly.

For the past four years, the Utah Office of Inspector General (OIG) has been responsible for conducting post-payment audits for the EHR Incentive program. At this time the auditor functions approximately 75% of full time doing Incentive Program audits. This auditor meets monthly with program leadership and participates in training sessions and CMS communities of practice related to the program. Each Provider that receives an EHR Incentive payment is eligible for an audit. For each stage of the incentive program, the OIG will audit a minimum of 10% of Eligible Professionals and 10% of Eligible Hospitals who have received EHR incentive payments. All providers are notified at the time of attestation of the requirement to retain the necessary documentation for this payment and are advised that they may be required to furnish this information to the program or its representative in the event of an audit. As of June 30, 2016 the OIG has audited 198 incentive payments and has identified 12 instances where payment was made incorrectly. Meaningful use Audits for dually-eligible hospitals have been delegated to CMS as per the Audit Plan (see in section "Attachments and References Not Hyperlinked").

Utah is able to track the cost of the projects by using time sheets to document the personnel costs. These time sheets are retained and can be audited. Provider incentive payments are disbursed through the MMIS and will be reported with a 100% FFP fund code. Personnel costs will be tracked at 90% FFP and will be broken down using category codes for technical development as well as program management for both the SMHP work and the IAPD work.

HITECH Administrative Funding Opportunities

We are integrating the SIM recommended HIT projects as they are identified and are consistent with the HITECH Administrative Funding opportunities. In this process, Medicaid provider types have been identified across the continuum of care. The goal of HITECH 90/10 IAPD applications is to reach out to these providers around specific use cases. A current list of potential projects prioritized in the SIM process with brief descriptions is found in table below.

Project	Project Description	Medicaid Project Description	Providers Types	Matching Source
ePOLST	Connect all SNF to cHIE	Onboarding Medicaid Providers	Long Term Care Providers	SNF civil money penalties
ePOLST	Upload ePOLST from SNF to PH registry	Query Exchange	Long Term Care Providers	SNF civil money penalties
ePOLST	Connect all EMS agencies to cHIE	Onboarding Medicaid Providers	Emergency Medical Provider Service Providers	BEMS grant $$
ePOLST	Provide EMS Access to ePOLST at POC	Query Exchange	Emergency Medical Provider Service Providers	BEMS grant $$
ePOLST	Provide ED departments access ePOLST at POC	Query Exchange	Emergency Medical Provider Service Providers	BEMS grant $$
CSDB	Connect CSDB to CHIE	Onboarding Medicaid Providers	Pharmacies	CSDB general funds
CSDB	Provide Access to CSDB at POC	Query Exchange	Emergency Medical Provider Service Providers	CSDB general funds
Ped BH Summary	Connect all BH providers to cHIE	Onboarding Medicaid Providers	Behavioral Health Providers	BMI/Department of Pediatrics
Ped BH Summary	Upload PED BH Summary	Query Exchange	Behavioral Health Providers	BMI/Department of Pediatrics
Ped BH Summary	Provide access to PED BH Summary at POC	Query Exchange	Behavioral Health Providers	BMI/Department of Pediatrics
THsISU	Establish Governance and Service Provision	Health Information Services Provider	Community-Based Providers	Business Case/Providers
MPI	State MPI	Provider Directories	Community-Based Providers	General fund?
Medicaid Expansion	Expansion of Medicaid coverage to correctional, homeless, MH/SUD	Onboarding Medicaid Providers	Correction Heath Providers	General fund
Trauma Registry	Electronic Health Record reporting to Registry	Public Health System development/connection	Community-Based Providers	BEMS funding
EMSC Registry	Electronic Health Record reporting to Registry	Public Health System development/connection	Community-Based Providers	BEMS funding

Utah's "To-Be" HIT Landscape

Utah Medicaid worked directly with our stakeholders to record the "As-Is" landscape and develop the "To-Be" landscape. As identified in our first iteration of the SMHP, we will continue to facilitate payments to eligible providers and hospitals. Medicaid will also continue to work with our established partners on current and future projects that bring us closer to our long term HIT/HIE goals. These goals include: providing credible information to consumers so they make informed health care decisions, reviewing provider quality data, seeing all Utah clinicians meaningfully use HIT, and connecting to our State's HIE to report timely and accurate public health data to improve population health. We will also seek to increase interoperability across the continuum of care of Medicaid providers which may include but, is not limited to onboarding, provider directories, secure electronic messaging, query exchange, care plan exchange, encounter alerting, public health systems development, and the provision of health information services.

Governance Landscape

Utah has appropriate HIT governance and partnerships in place as noted in the above 'As-Is' section. The State's Digital Health Service Commission includes broad representatives. Medicaid is a member of the UDOH Meaningful Use Workgroup including all public health partners from Immunizations, Syndromic Surveillance and Lab Reporting and Cancer Registry.

Provider Landscape

In an effort to continue to outreach and train eligible providers and hospitals about the Medicaid EHR Incentive Payment program, educational pages, and contact information will continue to be available and will be updated on our website. Utah Medicaid will continue to work with HealthInsight and UHIN in an effort to reach out to all Medicaid providers and provide education on the unique opportunity that is afforded us to improve our health care system through use of HIT. Utah Medicaid will conduct special training when requested to help Medicaid providers meet Meaningful Use.

Our continued message to eligible providers will mirror and reflect the communication materials of both CMS and HealthInsight. In short it will communicate that professional health care providers will be responsible to apply for, and submit accurate information, for the Medicaid incentive payment.

Legislative Landscape

As noted in the 'As-Is' section, the Utah Medicaid Program and our HIT/HIE partners have received all the needed legislation to continue to move forward with our EHR Incentive Payment Program. As Utah continues to implement the EHR Incentive Program new legislation may be required to insure broader access to medical data for professionals, hospitals, public health programs and entities in order to make informed decisions that will improve the health care outcomes for the citizens of Utah.

On the horizon, the Utah legislature has passed a bill to expand Medicaid coverage for some of the most at risk populations. Upon approval of this expansion, we would anticipate an increase in total Medicaid recipients. This may have the effect of increasing the number of providers with sufficient Medicaid patient volumes to attest for Meaningful Use.

Utah Medicaid Operations Landscape

In order to continually and successfully initiate payments to eligible providers and hospitals, certain business processes and documents (i.e. attestation/registration forms) have been developed, staff hired and provider outreach and education about the program has occurred. The EHR Program Manager continually engages with stakeholders and other Utah Department of Health and Department of Technology Services (DTS) staff to produce deliverables and meet milestones so payments can continue to Utah eligible providers and hospitals.

The State of Utah is currently compiling requirements and documentation for an RFP, with the intention of selecting a specialized audit vendor to support the EHR Incentive Program. The proposal will also be written to include operational support from this vendor. We anticipate initiating a full evaluation and update of the Audit Strategy. This will include the required changes in auditing approach for the 2014 Flex Rule and the 2015 Modified Stage 2 audit approach. If additional funding is required an IAPD-U will be submitted after CMS has approved the RFP process. An updated SMHP will be prepared when these program improvements are solidified.

The following table identifies the business processes that have been developed, tested, and documented by the designated program manager, program support staff, and DTS staff. The table has been updated to reflect expected start dates for when we will sunset our existing Oracle Solution and commence using CNSI's system for the following business processes:

EHR Incentive Program Activities Table

Specific Business Process or Requirement to Making EHR Incentive Payments	Oracle Solution Status	CNSI eMIPP Status	Expected Outcomes or Products	Responsible Staff • Lead • Support
Interface with NLR & CMS regarding payments made to eligible providers	Sunset date 7/1/2016	Fully functional as 7/1/2016.	A developed system that interfaces with the National Level Repository (NLR)	**Lead** DTS/CNSI - Developers EHR Program Manager **Support** Medicaid Staff
Verify Medicaid patient volume for all applicants, provide notification of approval/denial for incentive payments	Sunset date 7/1/2016	Fully functional as of 7/1/2016	Attestation Form and NLR interfaces will be in EMIPP.	**Lead** DTS/CNSI - Developers EHR Program Manager **Support** Medicaid Staff
Process payments to providers and hospitals, query claims data base to verify that providers meet Medicaid patient volume	Fully functional as of 10/1/2011	These functions will stay in legacy until the claims subsystem is functional, target date 12/16/2019	Payments made in timely manner to eligible providers, validation of patient volume	**Lead** DTS/CNSI - Developers EHR Program Manager **Support** Medicaid Staff
Create & maintain a Web site for Provider Enrollment & FAQs	7/1/16	Current site is fully operational as of 10/1/11 with continual updates throughout the life of the program. The links and web based trainings for eMIPP are available as of 7/1/16	Website is running with continuous updates, will replace Oracle link to the EMIPP database when ready to deploy	**Lead** EHR Program manager **Support** State DTS
Continue to develop communication materials about the EHR Incentive Program and/or EHR adoption/meaningful use	12/1/14	Ongoing	Communication strategy & plan that covers the new look and feel of EMIPP will begin a few months in advance of switching to EMIPP	**Lead** EHR Program Manager **Support** HealthInsight & UHIN Staff
Conduct provider outreach activities for HITECH interoperability projects	Ongoing	Ongoing	Webinars, meetings, and/or presentations conducted	**Lead** EHR Program Manager **Support** HealthInsight

Core Administration Activities Table

Specific Business Process or Requirement to Making EHR Incentive Payments	Expected Start Date	Continue or End Date	Expected Outcomes or Products	Responsible Staff • Lead • Support
Installed a provider help-line/dedicated e-mail address/phone	Ongoing	Ongoing	The EHR Program staff respond to calls, emails & correspondence regarding technical issues, program parameters, enrollment validation & disputes (not appeals)	**Lead** DTS - Developers EHR Program Manager **Support** Medicaid Staff
Monitor & review current CMS policies, propose recommended changes or inclusion of new policies & procedures, develop & update FAQ's for dispute resolutions	Ongoing	Ongoing	Effective business process models supported by stakeholders, plus technical system support changes as necessary & a consistently updated SMHP & IAPD	**Lead** EHR Program Manager **Support** Utah Hospital Association, HealthInsight & UHIN Staff
Validate volume thresholds, payment calculations, meaningful use, quality measures & provider credentials throughout the life cycle of the program.	3/1/15	Ongoing	Queries to calculate patient mix capturing results will remain in Oracle database until ECAMS is fully operationa (estimated 2017)	**Lead** DTS/CNSI - Developers EHR Program Manager **Support** Medicaid Staff
Review of administrative activities & expenses of Medicaid provider health information technology adoption & operations; financial oversight & monitoring of expenditures including provider enrollment procedures for combating fraud waste & abuse in the program	Ongoing	Ongoing	Compliance with the following: 42 CFR § 495.364 42 CFR § 495.366 42 CFR § 495.368, §455.15, §455.21	**Lead** EHR Program Manager **Support** Utah's Office of Inspector General, Medicaid Staff & HealthInsight Staff
Collaboration with Public Health Partners and cross continuum interoperability	Ongoing	Ongoing	Public health reporting for syndromic surveillance, lab reporting and Immunizations	**Lead** EHR Program Manager **Support** Public Health Partners

Future Pursuits

As discussed above, Utah has made great strides in the efforts to help providers across the state take on electronic health records and continually improve the functionality of these tools. Utah has also grown in the ability of our own systems to efficiently facilitate the state's HIT efforts. Going forward, we will continue to drive these efforts. Additionally, we are looking to expand our focus to help facilitate more broad interconnectivity in improving the healthcare we can deliver to our Medicaid members.

The following other possible projects and collaborations may include:

UHIN's cHIE is the first HIE in the country to be Electronic Healthcare Network Accreditation Commission accredited. The cHIE includes a Master Patient Index (MPI) and a record locator service that collects data from a federated database of data sources. They are also the only DIRECT service provider in the state, as of the date of this SMHP. Projects using DIRECT maybe explored in order to help providers achieve Stage 2 MU.

In addition, the cHIE is designed to carry out certain registry functions. Utah's cancer registry is in negotiations with UHIN to provide these services as part of Stage 2 MU. The cancer registry is actively pursuing possible 90-10 funding in order to support Medicaid Meaningful Use. The EHR Incentive program will continue to meet with Utah's cancer registry to review possible options so the cancer registry can participate.

The Utah Department of Health may supply immunization records, newborn hearing screenings, and newborn blood tests using the HL7 data exchange and possibly the cHIE.

In order to avoid making payments to providers who may owe Utah Medicaid money, program staff performs a manual check for providers currently in credit balance. This is currently performed by accessing a weekly report through Medicaid Operations. In the future when payments move into the PRISM system, we hope this process can be automated at the time of payment request.

A specific public health gateway is currently being reviewed by Utah's EDI Security Officer for compliance with HIPAA security standards. Data Consumers will be those entities that, with patient consent, may access the supplied clinical data via an EHR.

Utah Department of Health, including Medicaid, has been developing a department-wide electronic gateway for all public health programs to exchange clinical information with the cHIE. This HIT/HIE collaboration will have positive impact on efficiently using HIT/HIE resources and assuring system security. Medicaid may solicit funding to support the gateway's operation, upgrade, and expansion.

Utah Digital Health Service Commission Meeting will continue to facilitate and promote the adoption of the secure, effective and efficient exchange of electronic health data and services, as a means to reduce health care costs, enhance quality, increase access, and improve medical and public health services. Utah Department of Health and Utah Medicaid attend these meetings on a regular basis to provide updates and input as it pertains to HIT.

Utah will improve interoperability across the continuum of Medicaid providers in the prioritized use cases of behavioral health integration (pediatric psychiatric summaries and access to the controlled substance data base), advance care planning at the end of life (upload and access to the ePOLST at the point of care by skilled nursing facilities and emergency medical services) and Through an iterative development process, the executive work group which is part of the State of Utah Health IT Task Force has developed proposed aims and drivers for HIT within the State of Utah. The current HIT AIMS & Drivers from the Digital Health Service Commission include:

AIM 1: Increase Utah stakeholder use of key HIT-enabled tools by 60% to support timely and accurate information for value-based delivery of care and payment reform by December 2016.

Primary Driver 1: Increase key HIT-enabled infrastructure to support timely and accurate electronic data for quality, cost and patient record sharing.

Secondary Drivers for Primary Driver 1:

a. Develop statewide master person index
b. Develop master provider directory for multiple uses
c. Meaningful use of HIT to meet the emerging demands of value-based payments and improve delivery of care
d. Availability of tools to support individual responsibilities for personal health through HIT (including health literacy)
e. Continue building interfaces to cHIE

Primary Driver 2: Provide a range of tactics that support adoption and uptake of the use of the cHIE to improve health and meet the needs of value-based payment models.

Secondary Drivers for Primary Driver 2:

a. Conduct training/educational campaigns on HIT-enabled health
b. Opt-in model accelerated through leveraging patient population and providers who can most benefit from coordination of care through cHIE

Primary Driver 3:
Provide transparent reporting and analytic capacity for Utah Stakeholders.

Secondary Drivers for Primary Driver 3:

a. Identify and publish cost and quality standard metrics and benchmarks
b. Improve upon current databases and analytic tools for cost and quality metrics and benchmarks
c. Invest in optimizing a consumer-facing website

AIM 2: Increase Utah stakeholder capacities for privacy and security from the current baseline to 80% by 2016.

Primary Driver:
Provide risk mitigation tools and training/education for all Utah stakeholders.

Secondary Drivers for Primary Driver:

a. Conduct risk analysis of current HIT infrastructure
b. Make assistance available to smaller providers to assess and improve their HIT security and privacy processes
c. Test authorization, use and termination procedures
d. Support the training/education of all stakeholders to their responsibility for HIT infrastructure security and privacy

Aim 3: Improve state-wide interoperability and operationalize Strategic Goals and objectives in alignment with ONC Strategic HIT Roadmap

Primary Driver 1: ADVANCE THE HEALTH AND WELL-BEING OF INDIVIDUALS AND COMMUNITIES THROUGH PERSON-CENTERED AND SELF-MANAGED HEALTH

Secondary Drivers

1A. Increase use of individual health information for engagement and shared decision making as part of the team – Enable individuals to understand and act upon available cost and quality information

1B. Advance individuals' abilities to "access, control and amend" their health information, including public health (ex: immunization records)
1C. Increase adoption of patient portals and consumer-focused HIT available to patients
1D. Promote patient use of HIT tools for wellness and self-care
1E. Increase effective Patient/Consumer-mediated and generated exchange

Primary Driver 2: STRENGTHEN HEALTH CARE DELIVERY TRANSFORMATION
Secondary Drivers:
2A. Increase HIT functions to support transparency of and access to quality and cost information at the community and provider level to improve care
2B. Increase implementation of HIT functions to support innovative models of care that promote high-value health care – Medical Home, ACOs, Telehealth
2C. Increase use of electronic quality improvement tools and measurements that support provider adherence to evidence-based guidelines, improved outcomes and reduced waste
2D. Support the use of health IT to help providers and communities to better serve high-risk individuals and populations

Primary Driver 3: ENHANCE UTAH'S INTEROPERABLE HEALTH IT INFRASTRUCTURE
Secondary Drivers:
3A. Endorse basic guidelines for HIT standards that align with and strengthen national certification requirements, including interoperability, to increase effective health information exchange
3B. Protect privacy and security of electronic health information by increasing adherence to federal electronic health information security guidelines in independent facilities and practices
3C. Increase functionality and effectiveness of state-wide HIE (cHIE) and support increased connections with other data sources including IDS, HIEs, and providers.
3D. Increase ability to exchange public health information with providers through various exchange methods to improve population health
3E. Develop governance, access, and support for health data to be made available for analysis and use
3F. Increase Utah's influence on the national forums related to effective delivery of care through HIT

Primary Driver 4: SUPPORT INNOVATION AND APPLIED RESEARCH TO EFFICIENTLY IMPLEMENT STATEWIDE HEALTH IT INITIATIVES
Secondary Drivers:
4A. Promote collaborative innovation and research to advance implementation, utilization and improvement of health IT in public, private and academic settings
4B. Broaden statewide partnership and engagement in implementing the Utah HIT strategic plan
4C. Disseminate evidence-based best practices to enhance statewide adoption of technology solutions